

**Notice of Allowability**

Application No.

10/666,723

Applicant(s)

ZENG ET AL.

Examiner

Art Unit

HIRDEPAL SINGH

2611

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/28/2009.
2. ☒ The allowed claim(s) is/are 1,4,5,7,8,11-14 and 20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input type="checkbox"/> Notice of Informal Patent Application   |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>2/25/10</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                        |
|  | 9. <input type="checkbox"/> Other _____.  |



### DETAILED ACTION

1. This action is in response to the amendment filed on December 28, 2009. Claims 1-2, 4-8, 10-14 and 20 are pending and have been considered below.

### EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Diana Y. Fu on February 25, 2010.

The Claims in the application has been amended as follows.

#### **In the Claims:**

- (1) In claim 1, line 4; insert **–plurality of–** between **"the"** and **"subsequences"**.
- (2) In claim 1, line 4; replace **"the"** at the end of the line with **–a–**.
- (3) In claim 1, line 9; insert **–plurality of–** between **"each of the"** and **"self"**.
- (4) Please **cancel claim 2**.
- (5) In claim 4, line 4; insert **–plurality of–** between **"the"** and **"subsequences"**.

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(6) In claim 4, line 4; replace **“the”** at the end of the line with **–a-**.

(7) In claim 4, line 9; insert **–plurality of-** between **“each of the”** and **“self”**.

(8) In claim 5, line 4; insert **–plurality of-** between **“the”** and **“subsequences”**.

(9) In claim 5, line 4; replace **“the”** at the end of the line with **–a-**.

(10) In claim 5, line 9; insert **–plurality of-** between **“each of the”** and **“self”**.

(11) Please **cancel claim 6**.

(12) Please **cancel claim 10**.

(13) In claim 20, line 4; insert **–plurality of-** between **“the”** and **“subsequences”**.

(14) In claim 20, line 5; replace **“the”** between **“of”** and **“subsequence”** with **–a-**.

(15) In claim 20, line 11; insert **–plurality of-** at the beginning of the line.

### ***Allowable Subject Matter***

3. Claims 1, 4-5, 7-8, 11-14 and 20 are allowed.

4. The following is an examiner's statement of reasons for allowance: The prior art of record discloses a packet detection system and method in communication systems where the incoming signal samples are cross correlated with a known sequence and the resulted signal is then adjusted in sign and self correlated with a sum of correlation is used for detection, but prior art fails to disclose that for detection the system is

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processing the sum of the self correlations includes comparing for a period of time the magnitude of the sum of the self correlations to a first threshold and summing the sums of the self correlation whose magnitudes exceed the first threshold and comparing the magnitude of summed sums to a second threshold and also the sum of the self correlations includes comparing for a period of time the magnitude of the sum of the self correlations to a first threshold and summing magnitudes of the sum of the self correlation that exceed the first threshold and comparing the summed magnitudes to a second threshold.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Dabak et al. (US 7,039,036) discloses a reduced complexity synchronization codes with good correlation properties.

b. Tehrani et al. (US 2005/0078649) discloses a high data rate wideband packetized communication system.

c. Rohaly (US 7,324,665) discloses a system and method for multi resolution adaptive correlation processing.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to HIRDEPAL SINGH whose telephone number is (571) 270-1688. The examiner can normally be reached on Mon-Fri (Alternate Friday Off) 8:30AM-6:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on 571-272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. S./

Examiner, Art Unit 2611

/Shuwang Liu/

Supervisory Patent Examiner, Art Unit 2611